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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,602	01/23/2002	Akiko Miyakawa	1642.1002	6562
21171	7590	12/01/2004		
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER BISSETT, MELANIE D	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/031,602

Applicant(s)

MIYAKAWA ET AL.

Examiner

Melanie D. Bissett

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5,7,8,10-22,31-39 and 41-47 is/are pending in the application.
- 4a) Of the above claim(s) 20-22,31-39 and 41-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,7,8,10 and 13-19 is/are rejected.
- 7) ☒ Claim(s) 5,11 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

1. The claim objections and rejections under 35 USC 112 have been withdrawn based on the applicant's amendment. The rejections based on 35 USC 102 and 103 have been maintained or altered based on the applicant's amendment.

***Claim Rejections - 35 USC § 102***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 7-8, 10, and 13-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Canon.

4. From a prior Office action:

Canon teaches UV-curing coatings for glass aspherical lenses, where the coatings comprise a urethane-modified polyester (meth)acrylate, a polyfunctional (meth)acrylate, and a photopolymerization initiator (abstract). The lenses are useful in photographic lenses (still cameras) and video cameras (p. 2-p. 3). The polyurethane acrylates fit the applicant's formula (2), where polyester polyol residuals are present, isocyanate residuals are present, and hydroxyalkyl (meth)acrylates are added to the ends of the polyester urethane (p. 8-9). Trifunctional (meth)acrylates include those having molecular weights below 1000 g/mol (p. 9-10). Since the polyurethane (meth)acrylates are the same as those employed by the applicant, it is the examiner's position that the materials would inherently possess the same starting refractive index as that claimed by the applicant. Also, since the materials used in the coating are the same as those claimed by the applicant, it is the examiner's position that the coating would inherently possess the same starting refractive index as that claimed by the applicant. The coatings are shown to have no change when subjected to high humidity and temperature; thus, it is the examiner's position that the reference teaches hydroscopic dimensional change of less than 0.4% (Table 1). Also, the examples show high pencil hardness and low shrinkage upon curing (Table 1).

***Claim Rejections - 35 USC § 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claims 1 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fong et al.
7. From a prior Office action:

Fong teaches optical products comprising a base and optical layer, where the optical layer has a refractive index of at least 1.55 (abstract; col. 4 line 59-col. 5 line 3). The optical layers are polymerized and cured by use of UV light and a photoinitiator (col. 11 lines 45-65). Examples show composite films having refractive indices of 1.5890-1.5975, where the films are made from uncured resins having refractive indices of 1.5592-1.5755 (Table 3).
8. Additionally, Fong teaches that the compositions may be applied to optical lenses (col. 12 lines 59-65) and to glass substrates (col. 3 lines 16-27) but does not specify application to glass lens substrates. The reference teaches that any base material may be used as long as the material is optically clear and has sufficient structural strength (col. 3 lines 5-15). The compositions of the invention serve to increase index of refraction and thus increase brightness of a substrate (col. 1 lines 43-65). Since glass lens substrates are well-known in the optical element art, it is the examiner's position that it would have been prima facie obvious to apply the compositions of Fong's invention to glass lens substrates to improve the brightness gain of glass lens substrates.
9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Canon in view of Sato.
10. From a prior Office action:

Canon teaches aspherical lenses for cameras; however, the reference does not specify the use of the coatings on lenses for interchangeable lenses. Sato teaches that interchangeable lenses with aspherical properties are well-known in the art, where interchangeable lenses are used to provide extra magnification to a standard 35-mm camera (col. 1 lines 10-23). Thus, it would have been prima facie obvious to use the coatings of Canon's teaching for an interchangeable lens to provide standard cameras with extra magnification.

### ***Allowable Subject Matter***

11. Claims 5 and 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The closest prior art, Canon, teaches UV-curing coatings for glass lenses comprising a urethane-modified polyester (meth)acrylate, a polyfunctional (meth)acrylate, and a photopolymerization initiator. However, the reference does not teach the gel fraction of greater than 95% or the claimed polyfunctional (meth)acrylate having two or more benzene rings. It is the examiner's position that these limitations, when included in the claimed optical elements, provide a novel and unobvious step over the prior art.

### ***Response to Arguments***

13. In response to the applicant's arguments that the references do not teach the added limitations, the examiner has reasoned that the Canon reference would inherently teach the claimed refractive index values and that it would have been obvious to apply the coatings of Fong's invention to a glass lens substrate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (571) 272-1068. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**MELANIE BISSETT**  
**PATENT EXAMINER**

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